

WHAT IS CLAIMED IS:

1. A fertilizer comprising as a main component, a silica hydrogel, wherein the silica hydrogel is obtained by reacting an alkali silicate solution and a mineral acid and is aged by water washing under the conditions of a pH range of pH 4-8 and a temperature range of 40 - 100 °C.

2. A fertilizer as set forth in claim 1, wherein the fertilizer is wet pulverized to be in a paste state

3. A fertilizer as set forth in claim 1, wherein the pH range is pH 6-8 and the temperature range is 60 - 85 °C.

4. A fertilizer as set forth in claim 3, wherein the fertilizer is wet pulverized to be in a paste state.

5. A fertilizer as set forth in claim 1, wherein the pH range is pH 4 - 8, the temperature range is 40 - 100 °C, and an additional final pH range of pH 2-6.

6. A fertilizer as set forth in claim 5, wherein the fertilizer is wet pulverized to be in a paste state.

7. A fertilizer comprising, as a main component, a silica hydrogel, wherein the silica hydrogel is obtained by reacting an

alkali silicate solution and a mineral acid and is subsequently contacted with a solution containing one or more kinds of ions selected from the group consisting of iron ions, magnesium ions, calcium ions, aluminum ions, and ammonia ions.

8. A fertilizer as set forth in claim 7, wherein the fertilizer is wet pulverized to be in a paste state.

9. A method of manufacturing a fertilizer by:
obtaining a silica hydrogel by reacting an alkali silicate solution and a mineral acid;
aging the silica hydrogel by water washing under the conditions of a pH range of pH 4-8 and a temperature range of 40 - 100 °C; and
preparing the fertilizer comprising the aged silica hydrogel as a main component.

10. A method as set forth in claim 9, wherein an additional step involves wet pulverizing the fertilizer to be in a paste state.

11. A method as set forth in claim 9, wherein the pH range is pH 6-8 and the temperature range is 60 - 85 °C.

12. A method as set forth in claim 11, wherein an

additional step involves wet pulverizing the fertilizer to be in a paste state.

13. A method as set forth in claim 9, wherein a subsequent step in the aging process involves final washing after changing the pH range to a range of pH 2 - 6.

14. A method as set forth in claim 13, wherein an additional step involves wet pulverizing the fertilizer to be in a paste state.

15. A method of manufacturing a fertilizer by:

obtaining a silica hydrogel by reacting an alkali silicate solution and a mineral acid;

contacting the silica hydrogel with a solution containing one or more kinds of ions selected from the group consisting of iron ions, magnesium ions, calcium ions, aluminum ions, and ammonia ions; and

preparing the fertilizer comprising the silica hydrogel as a main component.

16. A method as set forth in claim 15, wherein a subsequent step involves wet pulverizing the fertilizer to be in a paste state.